KERLEY (C.G.)

CLINICAL HISTORY OF A "WALKER-GORDON BABY."

BY

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The baby, a vigorous, well formed male infant, was born in February, 1894, the weight one hour after birth being nine pounds four ounces. Nothing of importance occurred the first day or two of this infant's life. A greater part of the time was spent in sleeping, and in passive submission to the admiration of proud parents, interested friends, as is the custom of all well regulated new babies. On the third day nursing was commenced by the mother, a healthy young woman of about twenty-five years. Almost immediately following the first nursing there was an attack of colic. The nursing was continued at regular intervals, and was followed by colic at equally regular intervals. Diarrhœa of a moderately severe form soon developed; the stools were composed almost entirely of curds and mucus. There was no vomiting. The mother's milk was examined, and found to contain a normal amount of sugar and albuminoids, but was deficient in fat, showing approximately but one per cent., colostrum corpuscles were present but not in excess, in fact but few were found. All attempts to improve the mother's milk during a ten days trial having failed, and as the diarrhœa and colic continued, the nursing was stopped. Peptonized milk was the food selected to replace the breast milk. The milk was diluted—cream, milk and sugar added so that the proportions were: Fat 3; Alb. 1; Sugar 6. After a few feedings of this preparation, one ounce being given each time, the diarrhœa ceased but was followed by obstinate constipation and colic. The latter, bad enough while the patient was on the breast, now increased in severity. The stools consisted of large masses which were expelled in balls upon the use of a Glycerine Enema. After five days of repeated remodifying this method of feeding was given up, and the Walker-Gordon Milk containing

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Fat 2; Alb. 1; Sugar 6; Lime Water $\frac{1}{20}$ was ordered. One and one-half ounces were given every two hours during the day until ten P.M. Only two feedings were allowed during the night.

The Walker-Gordon milk was continued for five days, and during this time, there was but little improvement. The colic and constipation were almost as bad as before. On the third day the albuminoids were reduced to one-half per cent., with some improvement in the colic, but the constipation was still troublesome. All the albuminoids taken were evidently passed undigested. After a five days' trial the modified milk was discontinued at the parents' request, who were anxious to use the malted milk.

The Horlick Malted Milk was accordingly adopted as the next article of diet. While taking this the colic ceased entirely but the diarrhœa reappeared, and continued as long as the malted milk was given. After two weeks experimenting with various strengths and combinations, the malted milk was in turn discarded. The diarrhœa, which we tried in vain to check, now subsided without the use of drugs. The baby was six weeks old and weighed five ounces less than at birth. He looked old, tired and pinched. At this point the Walker-Gordon milk was again resumed with reduced albuminoids and increased Fat. A Fat 3; Sugar 6; Alb. 0.5 was ordered, three ounces being given at each feeding. The colic again appeared and the diahrrœa gave way to constipation, but the colic was not as severe nor the constipation as troublesome as before. All the casein or albuminoids taken were apparently present undigested in the stools. The first gain, however, a gain of eight ounces, was made in one week. At the commencement of the second week the milk was peptonized, and this was given a week's trial but without relief; in fact there seemed to be more colic, the constipation was just as obstinate, and there was no gain in weight. There seemed to be an absolute inability on the part of the child to tolerate the smallest amount of albuminoids. We now gave him the modified milk as free from the

albuminoids as possible. Fat 3; Sugar 6; Alb. 0.2; Lime Water $^1/_{20}$ was ordered, and fed to the child three ounces every two hours. At once the colic and constipation subsided, and a gain of seven ounces was made the first and nine ounces the second week. The boy was well and happy. There were two or three movements daily, the stools being normal with the exception that the 0.2 of one per cent. of albuminoids was present in small white particles. A 3.5 Fat; 6 Sugar; 0.2 Alb.; Lime Water $^1/_{16}$ was given for six weeks, and during this time, on this low percentage of albuminoids, four pounds one ounce were gained, an average weekly gain of nearly eleven ounces. The child was perfectly well, hard and strong. We now thought it safe to raise the albuminoids to one per cent., the fat, sugar and lime water remaining as before. Colic, constipation and undigested stools were the result, all of which subsided without the use of drugs, when the albuminoids were reduced to 0.2 of one per cent. For three weeks longer the 3.5 F., 6 Sugar, 0.2 Alb., Lime Water $^1/_{16}$ was continued, and thirty-one ounces gained. While on this low per cent. of albuminoids 0.2 of one per cent., nine weeks in all, an average gain of nine and two-thirds ounces was made weekly.

Our mistake made in the beginning was in trying to force the albuminoids, and in so doing acting according to our belief that they are an absolute requirement for the normal growth and development of the child. This was not the case with this baby. He was neither rachitic, flabby, nor pasty in appearance. The muscles were unusually firm, the skin clear. When seventeen weeks old, the albuminoids were increased to one per cent. and the fat to four per cent. The prescription called for Fat 4; Sugar 7; Alb. 1; Lime Water $^1/_6$. This was well taken and apparently digested without inconvenience, but the albuminoids could not be increased above one per cent. for three and a half months. At various times the amount was increased to one and a half per cent., and was always followed by an attack of indigestion, and we were obliged to return to the original

one per cent. During the three and a half months while on the 4—6—1 combination seven pounds thirteen ounces were gained, or an average weekly gain of nine ounces. When seven and a half months old the 1.50 per cent. of albuminoids was taken without inconvenience. He has just completed the ninth month, and we have never been able to get the albuminoids above this point. An increase of one-fourth per cent. will produce restlessness, one-half per cent. colic and diarrhœa. At the completion of the ninth month the weight was twenty-six pounds twelve ounces. The patient could stand with no other assistance than the hands resting on a chair. He sleeps soundly from 8 P.M. to 6 A.M. without waking. The muscles are hard, the fontanelle is $\frac{1}{2} \times \frac{1}{2}$. He has four perfect teeth, and two more nearly ready to appear. There is no rachitis. The first tooth was cut at the seventh month, and no disturbance has attended the cutting process. Fat 4; Sugar 7; Alb. 1.50; Barley Jelly $\frac{1}{6}$ to each feeding is the present diet, forty ounces being given in twenty-four hours. The barley jelly was added when the child was eight and a half months old. There has never been a loss in weight since the modified milk was brought into use the second time, which it will be remembered was at about the sixth week. From this time until the end of the ninth month, an average weekly gain of eight and a half ounces was made. For one week only there was no gain. The smallest amount gained in one week was three ounces, the largest amount fifteen ounces, and this large gain was made while the child was on the Fat 3.5; Sugar 6; Alb. 0.2 mixture. This is certainly a most satisfactory outcome of what was at first a very unpromising and troublesome case, and demonstrates what may be accomplished in the use of the Walker-Gordon milk when it is carefully adapted from day to day to meet the requirements and peculiarities of the patient.

In closing, it must be mentioned that the home care was excellent. The child was cared for almost entirely by a painstaking and devoted mother.

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